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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/709,006	04/07/2004	Hung-Jen Huang	12530-US-PA	3005

31561   7590   10/19/2007

JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE
7 FLOOR-1, NO. 100
ROOSEVELT ROAD, SECTION 2
TAIPEI, 100
TAIWAN

EXAMINER
MOTSINGER, SEAN T

ART UNIT	PAPER NUMBER
2624	

NOTIFICATION DATE	DELIVERY MODE
10/19/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

USA@JCIPGROUP.COM.TW

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/709,006	HUANG ET AL.
	Examiner	Art Unit
	Sean Motsinger	2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>7/27/2007</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-12</u> is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-12</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>27 July 2007</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☒ All   b)☐ Some * c)☐ None of:

         1.☒ Certified copies of the priority documents have been received.

         2.☐ Certified copies of the priority documents have been received in Application No. _____.

         3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
     Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

Response to Applicants Amendments/Arguments

1.   The argument and/or amendments to the claims filed on 7/27/2007 have been

entered and made of record.

2.   Regarding the Objection to the drawings, appliance amendments to the drawings

have been considered and it is determined that they overcome the current rejection.

3.   Regarding the Rejections to claims 1-2 and 7-8 under 35 U.S.C. 102 (b),

applicants arguments have been considered but are not persuasive. Applicant bases

his arguments on the fact that Chau allegedly does not disclose "executing a debug

analysis on the compressed image picture." The examiner disagrees, the examiner

is required to give the claims their broadest reasonable interpretation. The examiner

asserts that any handling of errors constitutes a debug analysis. Therefore the

"handling of errors" in Chau as cited in the previous action and discussed on page 5

of applicants arguments qualify as a debug analysis. Applicant also argues that "in

Chau the coding and decoding all relates to the bit stream, but not the picture."

However this argument cannot be persuasive since the bit steam is of a compressed

pictures as also discussed in applicants arguments (P, B pictures on page 5.)

4.   Regarding the Rejections to claims 3-4 and 9-10 under 35 U.S.C. 103 (1),

applicants arguments have been considered but are not persuasive. Applicant

claims that the feature "when the variable length decoding unit performs the debug

analysis on the compressed image picture and finds an error data the compressed

image picture is reloaded so as to perform the debug analysis on the picture again".

Applicant first argues that Richter cannot remedy the deficiency of Chau because

Decoding an MPEG video data bitstream cannot "tolerate some loss of sound and

video still maintain an acceptable quality and determine whether there is sufficient

time to flag the error and request a retransmission based on the predicted average

time delay." The examiner disagrees with this assessment Richter is discussing a

scenario where there is <u>no time to retransmit the damaged data</u> in this case Richter

correctly asserts that there is no point in retransmitting data that cannot be used and

therefore the decoding should be continued without the data. Further more Richter

merely states that audio and video may more tolerant to errors then other data

forms. It does not claim that there will be perfect reconstruction if there are no errors.

However regardless of weather the loss is "tolerable" this is for a situation with

cannot <u>retransmit the damaged data in time.</u> Therefore the loss of data must be

tolerated. Further more Chau itself suggests discarding data in that slices with

errors are "skipped" (see column 2 lines 4-6). Therefore this argument cannot be

found persuasive clearly Chau allows for discarded data.

5.   Applicant futher argues that Even combined Chau in view of Reichter cannot

render the invention obvious because it does not execute a decoding process in

pipeline. But later states that there is a decoding pipeline. This argument cannot be

found persuasive. The reaming statements under this section refer to elements

found in the specification not in the claim and are not relevant to the rejection.

6.   Regarding the Regarding the remaining 103(a) rejections these arguments rely

on arguments discussed above and are therefore likewise not found persuasive.

Rejections Under 35 U.S.C. 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7.   Claims 1-2 and 7-8 are rejected under 35 U.S.C. 102(b) as being anticipated by

Chau US 5,596,369.

8.   Re claim 1 Chau discloses an image decompressing circuit, comprising: a

variable length decoding unit (VLD see figure 2 58), for receiving a compressed

image picture (coded bit stream see figure 2 column 2 line 56-57) and executing a

debug analysis (handling of errors column 2 line 5) on the compressed image picture

(macro blocks column 2 line 4), wherein when a result of the debug analysis

indicates that the compressed image picture is suitable for a subsequent decoding

operation (if there is no error it is decoded column 2 lines 5-6), executing a decoding

process in pipeline (column 3 line 27) on the compressed image picture; and an

image picture recovery unit (everything after the VLD see figure 2), electrically

coupled to the variable length decoding unit (note it is clearly electrically coupled see

figure 2), for performing an inverse quantization (see element 14 figure 2 column 2

line 59), an inverse discrete cosine transformation (see element 16 figure 2 column

2 line 60) and a motion compensation (column 3 lines 28-29) with a pipeline process

(column 3 line 27) after the compressed image picture has been decoded with the

pipeline process (column 3 line 27), so as to recover the compressed image picture.

9.   Re claim 2 Chau further discloses wherein when the variable length decoding

unit performs the debug analysis on the compressed image picture and finds no

error data, the compressed image picture is determined suitable for the subsequent

decoding operation (column 2 lines 4-6 note decoding is continued if there is not

error it is not continued if there is an error)

10.   Re claim 7 Chau discloses A method of decompressing images, comprising:

receiving a compressed image picture (coded bit stream see figure 2 column 2 line

56-57); executing a debug analysis on the compressed image picture (handling of

errors column 2 line 5), wherein when a result of the debug analysis indicates that

the compressed image picture is suitable for a subsequent decoding operation (if

there is no error it is decoded column 2 lines 5-6), executing a decoding operation

on the compressed image picture with a pipeline process (column 3 line 27) ; and

performing an inverse quantization, an inverse discrete cosine transformation(see

element 14 figure 2 column 2 line 59) and a motion compensation with a pipeline

process after the compressed image picture has been decoded with the pipeline

process, so as to recover the compressed image picture.

11.   Re claims 7 and 8 these claims are the method preformed by the apparatus in

claims 1 and 2 respectively and are likewise rejected. (See rejections for claims 1

and 2).

Rejections Under 35 U.S.C. 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

12.   Claims 3, 4, 9, and 10 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Chau in view of Richter et al US 5,995,491.

13.   Re claim 3 Chau discloses all the elements of claim 1, Chau does not disclose

wherein when the variable length decoding unit performs the debug analysis on the

compressed image picture and finds an error data, the compressed image picture is

reloaded, so as to perform the debug analysis on the compressed image picture

again. Richter discloses wherein when the debug analysis on the data finds an error

data (error is detected column 8 lines 44), the data is reloaded (retransmitted column 8 lines 46), so as to perform the debug analysis on the data again. The motivation to combine is not retransmitting data which will arrive too late" (column 8 lines 47-52). Therefore it is obvious to combine Chau and Richter to reach the aforementioned advantage.

14.   Re claim 4 Chau discloses all of the elements of claim 1 Chau does not disclose wherein when the variable length decoding unit performs the debug analysis on the compressed image picture and finds more than a predetermined number of the error data and there is no sufficient time to reload the compressed image picture, the compressed image picture is aborted. Richter discloses wherein when the variable length decoding unit performs the debug analysis on the data and finds more than a predetermined number of the error data (note if there is any error it is flagged column 8 lines 40-45) and there is no sufficient time to reload the compressed data (column 8 lines 45-50), the compressed data is aborted (ignored column 8 lines 45-50). The motivation to combine is not retransmitting data which will arrive too late" (column 8 lines 47-52). Therefore it is obvious to combine Chau and Richter to reach the aforementioned advantage.

15.   Re claims 9 and 10 these claims are the method preformed by the apparatus in claims 3 and 4 respectively and are likewise rejected. (See rejections for claims 3 and 4).

16.   Claims 5 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Chau and Richter in further view of Kramer et al US 6,658,027.

17.   Re claim 5 Chau discloses all of the elements of claim 1. Chau does not

discloses wherein when the variable length decoding unit performs the debug

analysis on the compressed image picture and finds less than a predetermined

number of the error data and there is no sufficient time to reload the compressed

image picture, the compressed image picture is determined suitable for the

subsequent decoding operation.

18.   Richter discloses checking to see if there is sufficient time to reload the

compressed data (column 8 lines 45-50) combinable for the reasons stated above.

19.   Kramer discloses when the debug analysis finds less than a predetermined

number (high water mark column 11 lines 35-40) of the error data the compressed

image picture (frame column 11 lines 35-40) is determined suitable for the

subsequent decoding operation (contains enough relevant information to warrant

playback column 11 lines 35-40)

20.   Re claims 11 this claims is the method preformed by the apparatus in claim 5

and is likewise rejected. (See rejection for claim 5).

21.   Claims 6 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Chau in view of Lavallee et al US 5,267,242.

22.   Re claim 6 Chau discloses all of the elements of claim 1 Chu does not disclose

wherein the variable length decoding unit can selectively turn on or turn off the

debug analysis (ECC logic column 5 lines 5-10) function for the compressed image

picture. Lavallee discloses selectively turn on or turn off (column 5 lines 5-10)the

debug analysis function for the data. The motivation to combine is that "the ECC

logic can be enable or disabled" (ee column 5 lines 5-10).

23.   Re claim 12 this claims is the method preformed by the apparatus in claim 5 and

is likewise rejected. (See rejection for claim 6).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean Motsinger whose telephone number is 571-270-1237. The examiner can normally be reached on 9-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu can be reached on (571)272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Motsinger
10/12/2007

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